

In the Claims

Please amend the claims as follows:

1. (Amended) A method for forming a patterned microelectronics layer comprising:
providing a substrate having at least one conductor stud within a contact region formed therein;

forming on the at least one conductor stud a first lower sub-layer and a second upper sub-layer to provide a composite etch stop layer;

b1 forming over the composite etch stop layer an inter-level metal dielectric (IMD) layer;

forming over the IMD layer a photoresist mask layer pattern of an interconnection line trench pattern centered over the contact layer and transferring the pattern by etching while employing a first etching method through the IMD layer and the second upper sub-layer of the composite etch stop layer to the first lower sub-layer of the composite etch stop layer;

etching while employing a second etch method the first lower sub-layer from the trench pattern for the interconnection lines.

Please add the following claims:

21. The method of claim 1, wherein:

B2 (1) the first etching method employs a mixture of:

CF4;

CHF₃; and

oxygen

as etching gasses; and

(2) the second etch method employs argon as a sputtering gas.

22. The method of claim 12, wherein:

(1) the first etching method employs a mixture of:

CF₄;

CHF₃; and

oxygen

as etching gasses; and

(2) wherein etching of the first lower organic polymer sub-layer employs argon as a sputtering gas.

Remarks

Examiner Vinh is thanked for the thorough Office Action.

In the Claims

Independent claim 1 has been amended to include the limitation that at least one conductor stud is included within the contact region of the substrate.